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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,070	12/22/2005	Shinichiro Tanaka	334559.00017	5651
27160 7590 01/11/2008 PATENT ADMINISTRATOR KATTEN MUCHIN ROSENMAN LLP 1025 THOMAS JEFFERSON STREET, N.W. EAST LOBBY: SUITE 700 WASHINGTON, DC 20007-5201			EXAMINER KIANNI, KAVEH C	
			ART UNIT 2883	PAPER NUMBER
			MAIL DATE 01/11/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/562,070

Applicant(s)

TANAKA ET AL.

Examiner

Kianni C. Kaveh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

Applicant's election without traverse of claims 6-10 in a paper submitted on 10/25/07 is acknowledged. The requirement is still deemed proper and is therefore made FINAL.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation 'said first polarization plate' and 'the second polarization plate'. There is insufficient antecedent basis for these limitations in the claim.

Correction is required.

#### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly

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owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (US 20070064187).

Takeda teaches a liquid crystal display device (shown in at least fig. 1-17 and 147), comprising: a first substrate on which pixel electrodes are arranged in a matrix state (see at least fig. 1-5, 17 and 147 and parag. 0279, 0282, 0310); a second substrate on which a transparent electrode--parag. 0275-- is formed (see at least fig. 1-5, 17 and 147 and parag. 0279, 0282, 0310); orientation controlling means that are formed either on the said first substrate or the said second substrate (see at least fig. 1-5, 17 and 147, item orientation control means); alignment films deposited on the said two substrates to which vertical alignment treatment is applied (shown in at least fig. 1-17 and 147, also at least 0516-0522); and a liquid crystal layer having negative dielectric anisotropy, which is sandwiched between the two substrates, (shown in at least fig. 1-17 and 147 and 0480) where liquid crystal molecules are vertically aligned when no electric field is applied to the liquid crystal layer, and tilt to be aligned in directions controlled by the said orientation controlling means when electric field is applied to the liquid crystal layer (see at least fig. 7 and 0283), where the arrangement of the orientation controlling means in two types of pixels used as unit pixels is linearly

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symmetrical and approximately the same number of the two types of pixels are irregularly arrayed (shown in at least fig. 56, 114 and 160).

wherein the orientation controlling means comprise belt-shaped protrusions that are formed at least on either the first substrate or the second substrate, and slits corresponding to the said protrusions are formed on the other substrate in which no protrusions are formed (see at least parag. 0060 and 0061 for fig. 42-43); wherein the slits are formed on the said pixel electrodes, the belt-shaped protrusions being formed on the second substrate corresponding to the said slits (see at least fig. 132 and 0489), the said first polarizing plate being arranged outside the first substrate, and the second polarizing plate having a transparent axis which is orthogonal to the transparent axis of the first polarizing plate is arranged outside the second substrate (see at least parag. 0279); wherein the protrusions in a unit pixel comprise one or more L-shaped protrusions and one or more linear protrusions lying parallel with the L-shaped protrusions, and the slits consist of one or more of L-shaped slits lying parallel with the L-shaped protrusions and one or more linear slits lying parallel with the said linear protrusions (shown in at least fig. 56, 114 and 160); wherein the protrusions and the slits in a unit pixel be linear in form lying parallel with each other, and are arranged so as to create an angle of approximately 45.degree. in relation to the transparent axes of the first polarizing plate and the second polarizing plate (shown in at least fig. 56, 114 and 160 and see at least parag. 0295 and 0377).

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However, Takeda does not explicitly state that the above device is 'apparatus'. It is well known to those of ordinary skill in the art when the invention was made that a device is known as an apparatus since such apparatus provides realize a division of orientation directions of the liquid crystalline molecules for improving the viewing angle performance in the VA LCD (see 0013-0016).

***Citation of Relevant Prior Art***

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

Each of the following teach at least claim 6

US 20070064187 A1

US 7304703 B1

US 7227606 B2

US 7224421 B1

US 7167224 B1

US 6724452 B1

US 6661488 B1

US 20040169777 A1

JP 11-242225

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These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kianni C. Kaveh whose telephone number is 571-272-2417. The examiner can normally be reached on 9:30-19:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Cyrus Kianni  
Primary Patent Examiner  
Group Art Unit 2883

  
K. CYRUS KIANNI  
PRIMARY PATENT EXAMINER

January 6, 2008